



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

15 West Yakima Avenue, Suite 200 • Yakima, Washington 98902-3452 • (509) 575-2490

April 29, 2005

Arthur den Hoed
62002 N Mission Rd
Grandview WA 98930-34953

Re: **Amended Emergency Drought Permit No. G4-34953**

In accordance with the provisions of RCW 43.83B.405, on March 10, 2005, it was ordered and determined by the Director of the Department of Ecology that the State of Washington is under drought conditions. In accordance with the provisions of WAC 173-166-060, the Department of Ecology is under the terms of this Order, issuing an EMERGENCY DROUGHT PERMIT. The intent of this authorization is to alleviate hardships and reduce the burdens on water users arising from the drought conditions.

THIS AUTHORIZATION SHALL IN NO MANNER BE CONSTRUED TO GUARANTEE OR IMPLY THAT A FINAL (REGULAR) PERMIT WILL ISSUE FOR THE FUTURE USE OF THE WATER USE HEREIN AUTHORIZED.

The Department of Ecology has agreed to fund the cost of the mitigation or offsets for the impacts associated with the drought emergency authorizations. Ecology is attempting to meet the essential irrigation needs of farmers growing perennial crops (such as orchard crops, grapes, hops, etc.) where the loss of irrigation water would permanently damage the crops. Through the use of emergency supplemental wells, Ecology is authorizing up to 80% of the usual irrigation water supply delivered by the irrigation districts. In a normal year, Roza Irrigation District is prepared to deliver 3 to 3.3 acre-feet of water per acre. 80% of 3.3 acre-feet is 2.6 acre-feet. Roza Irrigation District is expected to deliver approximately 0.8 acre-feet of water. This authorization will allow up to 1.8 acre-feet of water per acre.

This authorization is subject to the following limitations and provisions:

This authorization is for two new wells located within the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ (Well) 1 and the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ (well 2) of Section 5, T. 10 N., R. 23 E.W.M.

The instantaneous quantity of water to be withdrawn is limited to 2000 gallons per minute.

A total of 779.3 acre-feet of water is authorized under this emergency permit for the supplemental irrigation of 633.5 acres.

The place of use is described as follows:

Yakima County Tax Parcel Nos. 23100421004 and 23100423003 within Section 4; 23100514002, 23100511001, 23100512001, 23100521001, 23100541001, 23100542002, 23100531001, and 23100543002 within Section 5; 23100741001 and 23100744002 within Section 7; and 23100821001 and 23100823001 within Section 8, all within T. 10 N., R. 23 E.W.M., Yakima Co. Washington.

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Amended Construction Provisions

It is unlikely that the requested instantaneous quantity of 2000 gpm can be obtained from the Saddle Mountains Aquifer in this area. The Ellensburg Aquifer is not considered an option in this area due to its limited thickness and protection of domestic wells.

Upon completion of Well 1 (SW¼, SE¼ Section 5, T. 10 N., R. 23 E.W.M.) under Drought Authorization No. G4-34953 into the Saddle Mountains Aquifer, it was determined that the quantity of water requested was not attainable from the Saddle Mountains Aquifer at the location of Well 1. As a result, the applicant may choose to develop emergency drought Well 1 (SW¼, SE¼) into the Wanapum Aquifer according to the provisions outlined below.

Well 2 (SE¼, SE¼ Section 5, T. 10 N., R. 23 E.W.M.) shall be completed into the Saddle Mountains according to the provisions outlined below. Should the maximum yield from Well 2 (SE¼, SE¼) be determined to be insufficient, the applicant may choose to develop emergency drought Well 2 (SE¼, SE¼) into the Wanapum Aquifer according to the provisions outlined below.

To develop a well in the Saddle Mountains Aquifer, the well must comply with the following construction requirements and restrictions:

- (a) Unperforated casing shall be set or placed (not driven) twenty (20) feet into the top of the Pomona Member (basalt) of the Saddle Mountain Formation, which is estimated to occur at or below a depth of approximately 310 feet for the proposed well in the (Well 1) and 240 feet for the proposed well in the SE¼ of the SE¼ (Well 2).
- (b) The well casing annulus shall be sealed with a neat cement or neat cement grout. The sealing material shall be placed in the annulus by pumping to seal the entire annulus from the bottom of the casing to the land surface.
- (c) The well annulus shall be at least four (4) inches greater in diameter than the permanent casing.
- (d) The well depth shall terminate at or above a depth corresponding to the top of the Priest Rapids Member of the Wanapum Formation, which should be encountered at a depth of approximately 730 feet for the proposed well in the SW¼ of the SE¼ (Well 1) and 645 feet for the proposed well in the SE¼ of the SE¼ (Well 2).
- (e) Installation of an airline and an access port for water level measurement is required.

To develop a well in the Wanapum Aquifer, the well must comply with the following construction requirements and restrictions:

- (a) Unperforated casing shall be set or placed (not driven) twenty (20) feet into the top of Priest Rapids Member of the Wanapum Formation, which should be encountered at a depth of approximately 730 feet for the well in the SW¼ of the SE¼ (Well 1) and 645 feet for the proposed well in the SE¼ of the SE¼ (Well 2).
- (b) The well casing annulus shall be sealed with a neat cement or neat cement grout. The sealing material shall be placed in the annulus by pumping to seal the entire annulus from the bottom of the casing to the land surface.

- (c) The well annulus shall be at least four (4) inches greater in diameter than the permanent casing.
- (d) The well depth shall terminate at or above a depth corresponding to the top of the Sentinel Bluffs Member (basalt) of the Grande Ronde Formation, which is approximated to occur at a depth of around 1,500 feet.
- (e) Upon completion of the well(s), the well(s) is/are to be video taped. The tape(s) is/are to be submitted to the Department of Ecology Water Resources Program with 15 days of completion of the well(s).
- (f) Installation of an airline and an access port for water level measurement is required.

When flowing artesian conditions are known or suspected, the operator shall have a written sealing plan prepared prior to initiation of construction. Flowing wells shall be so constructed and equipped with valves to ensure that the flow of water can be completely stopped when not being used. Likewise, the well shall be so maintained as to prevent the waste of water through leaky casings, pipes, fittings, valves, or pumps -- either above or below land surface.

In either case, the applicant shall require the driller to collect and retain drill cuttings for Ecology to submit for laboratory analysis as follows:

The driller shall collect and retain basalt chip samples starting with the first basalt encountered and every 20 feet thereafter and at significant changes in lithology. The depth each sample is taken from shall be recorded with the sample. Gross sample size should be large enough to provide a net minimum of sixteen (16) ounces of dry, clean, washed basalt chips from each sample. Staff from Ecology will pick up the samples during and/or at the conclusion of drilling and may arrange for X-ray Fluorescence Analysis. As soon as the drilling schedule is established, the applicant shall notify Anna Hoselton (509) 454-7887 or Ron Dixon (509) 454-7897 at the Department of Ecology, Yakima, WA, to go over any questions and arrange for site access by Ecology staff.

The new well shall be constructed by August 1, 2005. If the new well is not completed by August 1, 2005, you must notify Ecology and provide us with an estimated completion date and a statement describing how the well will be used to provide supplemental water this year. If the well cannot be completed in sufficient time to provide water this year, this emergency permit will be cancelled.

A suitable flow meter approved by the Department of Ecology shall be installed and maintained in accordance with Chapter 173-173 WAC. (Installation, operation and maintenance requirements attached hereto.)

Whenever water is being withdrawn, bi-weekly (every two weeks) readings of the flow meter shall be recorded and maintained by the permittee. These readings shall be documented by time, date, withdrawal rate, and the person conducting the measurements. Copies of these records shall be submitted to the Department of Ecology by November 15, 2005.

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the records of water use that are kept to meet the above conditions, and to inspect at reasonable times any measuring device used to meet the above conditions.

Withdrawal of water under this authorization may be limited or otherwise regulated in favor of senior rights.

This drought emergency authorization expires on October 31, 2005.

This Order may be appealed pursuant to Chapter 43.21B RCW. Any person wishing to appeal this Order must file an appeal with the Pollution Control Hearings Board **within thirty (30) days of receipt of this Order**. Send the appeal to: Pollution Control Hearings Board, PO Box 40903, Olympia, Washington 98504-0903. At the same time, a copy of the appeal **must** be sent to: Department of Ecology, Water Resources Appeals Coordinator, PO Box 47600, Olympia, Washington 98504-7600.

Sincerely,



Robert F. Barwin, Section Manager
Water Resources Program
Central Region Office

RFB:gg
0504105

Enclosures: Flow Meter Requirements
 Your Right To Be Heard

cc: Carroll Palmer, Director, Natural Resources Division, Yakama Nation
 Curt Hart, Water Resources Program, HQ